From: Wong.Herman@epamail.epa.gov

To: Jen.Mark@epamail.epa.gov

Date: 1/30/2013 3:04:29 PM

Subject: Re: Donlin Gold Project - Cooperating Agency Scoping Meeting - February 6 (1pm to 4 pm

Alaska Time)

Mark:

Below are the air quality and meteorology scoping issues and concerns.

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The following applies to all project alternatives.

- A. Environmental Setting Section
- 1. Baseline Air Quality and Meteorological Data.
- a. What is the period of the record of the collected air quality and meteorological data? Air quality data should include pollutants with ambient air quality standards (i.e., SO₂, NO₂, CO O₃, PM₁₀, PM_{2 5}. and Pb).
- b. Does the air quality and meteorological data meet EPA PSD collection requirements?
- c. Have the data been validated?
- d. Provide maps that show the locations and terrain elevation of all past and present air quality and meteorological data collection stations.

(Note: EPA has expressed concern with the quality of the data to Donlin and AK DEC.)

- 2. Discuss air quality, climate and visibility conditions.
- 3. Identify nearest Class I areas and Class II sensitive areas. The latter should be confirmed with the FLMs.
- 4. Discuss surrounding topography, pollutant transport and dispersion, and potential secondary formation of air pollutants.
- 5. Identify and discuss nearby source emissions that could have a cumulative impact.
- 6. Present and discuss federal and state air quality standards, increments and thresholds.
- 7 Discuss area designation (i.e, attainment, non-attainment or unclassified).
- 8. Identify any nearby sensitive receptors (i.e., schools, hospitals, churches...etc.)
- 9. Identify and discuss applicable air quality laws, regulations, standards, and guidance.
- 10. Identify and discuss required air permits.
- B. Consequence/Impact Section
- 1. Include a plot plan/facility layout showing ambient air boundary, location of all emission sources, buildings, structures, north arrow and scale.
- 2. Provide emission inventories of all project combustion and non combustion sources. This would include sources of emissions during the construction and operation phases (e.g., diesel engines, turbines, mobile sources, aircraft (ferrying work crews?), vessels, fugitive, pipeline, road dust...etc.)

9/13/2018

- 3. Provide and discuss the calculation methodologies and assumptions of all emission rates, both short term (g/sec, lbs/hr, lbs/dy and long term (tns/yr). This would include operating hours, fuels, heat input...etc.)
- 4. Provide stack parameters for point sources (height, temperature, exit velocity and diameter), and dimensions for area and volume sources.
- 5. Conduct and provide a GEP stack height analysis (i.e., BPIPPRM).
- 6. Discuss and provide a map showing the project definition of ambient air.
- 7. Discuss and provide a map showing project modeling domain. This would include ambient air boundary, near field, far field, sensitive receptor locations, map scale and north arrow.
- 8. Summarize and discuss the representativeness of the measured air quality data used for background levels.
- 9. Identify the representative meteorological data that will be used with EPA guideline or non-guideline model(s) to predict project concentration impacts during construction, start-up/shutdown, and operation phases.
- 10. Identify the EPA guideline or non-guideline that will be used to predict project compliance with air standards, increments, and de minimus levels. In addition, identify any options selected that are not regulatory defaults.

(Note: If a non-guideline model is proposed to predict concentrations in complex terrain, please inform EPA as soon as possible. This approach will require a Section 3.2.2.e demonstration pursuant to Appendix W in 40 CFR51.

- 11. Conduct an AQRV analysis consistent with FLM requirements.
- 12. Address secondary formation of O_3 and $PM_{2.5}$ (i.e., sulfates, nitrates and VOCs). The latter three should be included with primary $PM_{2.5}$ to determine compliance with air standards.
- 13. Provides tables summarizing the data and model results, and graphics/isopleths to display the locations of predicted concentration.
- 14. The above applies to both a project only analysis and a cumulative analysis.
- C. References

There should be a reference sections for sources of assumptions, information and data.